



SEQUENCE LISTING

<110> BOZZONI, IRENE
CAFFARELLI, ELISA
LANEVE, PIETRO

<120> PURIFICATION, CLONING AND BIOCHEMICAL CHARACTERIZATION
OF XENDOU, ENDORIBONUCLEASIC ACTIVITY INVOLVED IN SMALL
NUCLEAR RNA SPLICING-INDEPENDENT BIOSYNTHESIS IN
XENOPUS LAEVIS

<130> 2520-1050

<140> 10/520,401

<141> 2005-09-12

<150> PCT/IT03/00424

<151> 2003-07-04

<150> IT RM2002A000365

<151> 2002-07-08

<160> 10

<170> PatentIn Ver. 3.3

<210> 1

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<212> DNA

<213> Xenopus laevis

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<221> CDS

<222> (39) .. (914)

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cag ctg aac cat gaa ctc tcc aag ctg ttt aat gag ctg tgg gac gca	104
Gln Leu Asn His Glu Leu Ser Lys Leu Phe Asn Glu Leu Trp Asp Ala	
10 15 20	
gat cag aac cgg atg aag tcc ggg aag gat tat cgg atc tcc ttg cag	152
Asp Gln Asn Arg Met Lys Ser Gly Lys Asp Tyr Arg Ile Ser Leu Gln	
25 30 35	
ggt aaa gca ggg tac gta ccc gcc ggt tcc aac cag gcc agg gac agc	200
Gly Lys Ala Gly Tyr Val Pro Ala Gly Ser Asn Gln Ala Arg Asp Ser	
40 45 50	
gcc tcg ttc ccg ctc ttc cag ttc gtc gat gag gag aag ctg aag agc	248
Ala Ser Phe Pro Leu Phe Gln Phe Val Asp Glu Glu Lys Leu Lys Ser	
55 60 65 70	

agg aag acg ttt gca acc ttc att tcc ctg ctg gac aat tat gag atg	296
Arg Lys Thr Phe Ala Thr Phe Ile Ser Leu Leu Asp Asn Tyr Glu Met	
75 80 85	
gac acg ggg gtg gcc gag gtt gtg act ccg gag gaa atc gct gaa aac	344
Asp Thr Gly Val Ala Glu Val Val Thr Pro Glu Glu Ile Ala Glu Asn	
90 95 100	
aac aac ttc ctg gac gcc att ctg gaa acc aaa gtg atg aag atg gca	392
Asn Asn Phe Leu Asp Ala Ile Leu Glu Thr Lys Val Met Lys Met Ala	
105 110 115	
cat gac tac ctg gtg agg aag aac caa gcc aaa ccc acc cgg aat gac	440
His Asp Tyr Leu Val Arg Lys Asn Gln Ala Lys Pro Thr Arg Asn Asp	
120 125 130	
ttc aag gtc caa ctg tac aac atc tgg ttc cag ctg tac tca cgg gcc	488
Phe Lys Val Gln Leu Tyr Asn Ile Trp Phe Gln Leu Tyr Ser Arg Ala	
135 140 145 150	
cca ggg agc aga ccc gat tgc tgc ggc ttt gag cac gtg ttt gtg gga	536
Pro Gly Ser Arg Pro Asp Ser Cys Gly Phe Glu His Val Phe Val Gly	
155 160 165	
gaa tcg aag cga ggg cag gag atg atg ggg ctt cac aac tgg gtc cag	584
Glu Ser Lys Arg Gly Gln Glu Met Met Gly Leu His Asn Trp Val Gln	
170 175 180	
ttt tac ctt cag gag aag agg aag aac atc gac tat aaa gga tac gtg	632
Phe Tyr Leu Gln Glu Lys Arg Lys Asn Ile Asp Tyr Lys Gly Tyr Val	
185 190 195	
gct cgg cag aac aag agt cgg ccg gat gaa gat gat cag gtg ttg aac	680
Ala Arg Gln Asn Lys Ser Arg Pro Asp Glu Asp Asp Gln Val Leu Asn	
200 205 210	
ctg cag ttc aat tgg aag gag atg gtg aaa ccc gtc ggc agc agc ttc	728
Leu Gln Phe Asn Trp Lys Glu Met Val Lys Pro Val Gly Ser Ser Phe	
215 220 225 230	
att ggc gtc agc ccg gaa ttc gaa ttc gcc ctt tac acc atc gtc ttc	776
Ile Gly Val Ser Pro Glu Phe Glu Phe Ala Leu Tyr Thr Ile Val Phe	
235 240 245	
ctc gcg tct cag gag aag atg agc cga gaa gtc gtt cgg ctg gaa gaa	824
Leu Ala Ser Gln Glu Lys Met Ser Arg Glu Val Val Arg Leu Glu Glu	
250 255 260	
tac gaa ctg cag atc gtc gtc aat cgc cac ggc cgt tat ata ggg acc	872
Tyr Glu Leu Gln Ile Val Val Asn Arg His Gly Arg Tyr Ile Gly Thr	
265 270 275	
gcc tac ccc gtc ctc ctg agc acc aat aac ccg gat ctg tac t	915
Ala Tyr Pro Val Leu Leu Ser Thr Asn Asn Pro Asp Leu Tyr	
280 285 290	
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<212> PRT

<213> *Xenopus laevis*

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Tyr	Arg	Ile	Ser	Leu	Gln	Gly	Lys	Ala	Gly	Tyr	Val	Pro	Ala	Gly	Ser	35	40	45	
Asn	Gln	Ala	Arg	Asp	Ser	Ala	Ser	Phe	Pro	Leu	Phe	Gln	Phe	Val	Asp	50	55	60	
Glu	Glu	Lys	Leu	Lys	Ser	Arg	Lys	Thr	Phe	Ala	Thr	Phe	Ile	Ser	Leu	65	70	75	80
Leu	Asp	Asn	Tyr	Glu	Met	Asp	Thr	Gly	Val	Ala	Glu	Val	Val	Thr	Pro	85	90	95	
Glu	Glu	Ile	Ala	Glu	Asn	Asn	Asn	Phe	Leu	Asp	Ala	Ile	Leu	Glu	Thr	100	105	110	
Lys	Val	Met	Lys	Met	Ala	His	Asp	Tyr	Leu	Val	Arg	Lys	Asn	Gln	Ala	115	120	125	
Lys	Pro	Thr	Arg	Asn	Asp	Phe	Lys	Val	Gln	Leu	Tyr	Asn	Ile	Trp	Phe	130	135	140	
Gln	Leu	Tyr	Ser	Arg	Ala	Pro	Gly	Ser	Arg	Pro	Asp	Ser	Cys	Gly	Phe	145	150	155	160
Glu	His	Val	Phe	Val	Gly	Glu	Ser	Lys	Arg	Gly	Gln	Glu	Met	Met	Gly	165	170	175	
Leu	His	Asn	Trp	Val	Gln	Phe	Tyr	Leu	Gln	Glu	Lys	Arg	Lys	Asn	Ile	180	185	190	
Asp	Tyr	Lys	Gly	Tyr	Val	Ala	Arg	Gln	Asn	Lys	Ser	Arg	Pro	Asp	Glu	195	200	205	
Asp	Asp	Gln	Val	Leu	Asn	Leu	Gln	Phe	Asn	Trp	Lys	Glu	Met	Val	Lys	210	215	220	

Pro Val Gly Ser Ser Phe Ile Gly Val Ser Pro Glu Phe Glu Phe Ala
 225 230 235 240
 Leu Tyr Thr Ile Val Phe Leu Ala Ser Gln Glu Lys Met Ser Arg Glu
 245 250 255
 Val Val Arg Leu Glu Glu Tyr Glu Leu Gln Ile Val Val Asn Arg His
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 Gly Arg Tyr Ile Gly Thr Ala Tyr Pro Val Leu Leu Ser Thr Asn Asn
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 Pro Asp Leu Tyr
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<210> 5
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